REMARKS

Claims 1-11, 13-26 and 28-43 remain pending in the present application. Claims 12 and 27 have been cancelled. Claims 1-4, 8-11, 13-15, 17-19, 23-26, 28, 29, 38 and 41-43 have been amended. Basis for the amendments can be found throughout the specification, claims and drawings as originally filed.

DRAWINGS

The drawings are objected to under 37 CFR 1.83(a). The drawings were objected to for various informalities. The drawings have been amended to overcome the objection. Withdrawal of the objection is respectfully requested.

SPECIFICATION

The disclosure is objected to because of informalities. The specification has been amended to overcome the objection. Withdrawal of the objection is respectfully requested.

CLAIM OBJECTIONS

Claims 2 and 41 are objected to because of informalities. Claims 2 and 41 have been amended to overcome the objection. Withdrawal of the objection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 3-11, 15-16, 18-26, 29-30, 32-37, 40 and 42 are rejected under 35 U.S.C. § 102(b) as best understood as being anticipated by Waldrum (U.S. Pat. No. 3,765,378). Applicants respectfully traverse this rejection, Independent Claims 1 and 15 have been amended to define a first disc defining first and second slots, a second disc with a first pin and a third disc with a second pin. The first disc is defined as being positioned between the second and third discs. Thus, the present invention defines a system where the slotted disc is a the center and the discs with the pins are located on either side of the slotted disc. This arrangement provides the advantage that the two opposing compression chambers can communicate with each other allowing for communization of the fuel injection system.

Waldrum (U.S. Pat. No. 3,765,378) is exactly opposite to the construction defined in amended Claims 1 and 15. Waldrum has the center disc having the pins and the two side discs having the slots. Thus, Waldrum does not provide the opportunity of having the compression chambers communicate with each other and thus Waldrum requires a separate fuel injector 162 for each cylinder. By not having the arrangement defined in amended Claims 1 and 15, the costs and complexity of Waldrum's system is increased.

Thus, Applicants believe Claims 1 and 15, as amended, patentably distinguishes over the cited prior art. Likewise, Claims 3-11, which ultimately depend from Claim 1, and Claims 16, 18-26, 29, 30, 32-37 and 40, which ultimately depend from Claim 15, are also believed to patentably distinguish over the art of record. Reconsideration of the rejection is respectfully requested.

Regarding Claim 42, it has been amended to define a fuel injector which is rotatably disposed with respect to the housing and movable between a first and a second location.

Waldrum discloses a cylinder 162 which has a channel 214 which is in communication with a fuel manifold 178. Channel 214 will align with Channel 212 as rotors 24 and 26 rotate about cylinder 162 to inject fuel into combustion chamber 210. Waldrum does not disclose a fuel injector which injects fuel into two separate locations in a combustion chamber. Waldrum discloses two fuel injectors which inject fuel into a single location of two compression chambers. Combustion chamber 210 on the left wheel 24 and combustion chamber 210 on the right wheel 26. Claim 42 defines a housing that defines a single combustion chamber, not two separate combustion chambers.

Thus, Applicants believe Claim 42, as amended, patentably distinguishes over the art of record. Reconsideration of the rejection is respectfully requested.

Claim 42 is rejected under 35 U.S.C. §102(b) as best understood as being anticipated by Demopoulos (U.S. Pat. No. 4,571,946). Claim 42 has been amended to define a fuel injector rotatably disposed with respect to the housing where the fuel injector is movable rotatively between the first and second positions. Fuel injector 65 is threadingly received with holes 66 but it is not movable rotatively between two positions.

Thus, Applicants believe Claim 42, as amended, patentably distinguishes over the art of record. Reconsideration of the rejection is respectfully requested.

Claim 43 is rejected under 35 U.S.C. §102(b) as best understood as being anticipated by Hamajima, et al. (U.S. Pat. No. 4,712,600). Claim 43 has been amended

to define a single piece piston for an engine where the entire body is a porous material. Hamajima, et al. discloses a multi-component piston where one of the components is porous.

Thus, Applicants believe Claim 43, as amended, patentably distinguishes over the art of record. Reconsideration of the rejection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claims 14 and 41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Waldrum (U.S. Pat. No. 3,765,378) in view of Burk (U.S. Pat. No. 4,615,171). Claim 14 ultimately depends from Claim 1 and Claim 41 ultimately depends from Claim 15. As stated above, Claims 1 and 15 have been amended and are now believed to patentably distinguish over the art of record. Thus, Claims 14 and 41 are also believed to patentably distinguish over the art of record. Reconsideration of the rejection is respectfully requested.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the

Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: September 27, 2004

By: _____
Michael J. Schmidt, 34,007

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MJS/pmg

AMENDMENTS TO THE DRAWINGS

The attached "Replacement Sheet" of drawings includes changes to Figures 14 and 17. The attached "Replacement Sheet," which includes Figures 7, 14 and 17, replaces the original sheet including Figures 7, 14 and 17.

Figure 14, please change reference numeral 194 to reference numerals 94 (194).

Figure 17, please revise the cross-hatching to show a porous metal material.

Attachment: Replacement Sheet